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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,903	07/27/2001	Yongmei Cang	PU010152	8714

24498 7590 08/25/2005

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EXAMINER

SHANNON, MICHAEL R

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,903

Applicant(s)

CANG ET AL.

Examiner

Michael R. Shannon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20030624.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Shintani et al (USP 6,137,546), cited by Examiner.

Regarding claim 1, the claimed “method of creating a subset of channels with programming from a plurality of channels” is met as follows:

- The claimed step of “receiving a plurality of channels, wherein the plurality of channels comprises at least one channel with programming” is met by the television receiver being capable of receiving conventional analog television signals, as well as digital television signals [col. 2, lines 31-34].
- The claimed step of “encoding at least a portion of a predetermined number of channels from the plurality of channels to provide a corresponding encoded signal for each of the predetermined number of channels” is met by the fact that the digital television signals are received in pre-encoded format (MPEG format) and therefore are encoded prior to reception at the user device [col. 3, lines 18-27].

- The claimed step of “processing each of the corresponding encoded signals to determine which of the predetermined number of channels contain programming to provide the subset of channels with programming” is met by the autoprogramming of the channels and the storage of the skip data memory 33 [col.4, lines 45-56].
- The claimed step of “storing the subset of channels into memory” is, again, met by the storage of the skip data memory 33 [col. 4, lines 45-56].

Regarding claim 2, the claimed “method according to claim 1, further comprising the step of outputting channels exclusively corresponding to the subset of channels” is met by the fact that the “1” in the “skip flag data” column indicates that the channel is not to be skipped during operation by the user [col. 4, lines 45-56].

Regarding claim 3, the claimed “method according to claim 1, further comprising the step of analyzing at least a portion of an audio signal in the predetermined channels to determine which of the predetermined number of channels contain programming” is met by the separation of the audio portion of the signal for detection [col. 3, lines 22-25]. The system can detect a valid 8VSB signal by obtaining a valid segment of video or audio [col. 5, line 10].

Regarding claim 4, the claimed “method according to claim 1, wherein each corresponding encoded signal is an MPEG video signal containing pictures selected from the group comprising intra pictures or non-intra pictures” is met inherently by the teachings of the MPEG standard. Shintani expressly teaches that the encoded signals are MPEG format [col. 3, line 25], however, is silent as to the inner-workings of the

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MPEG standard, only stating that it is a well-known video format used in the United States. This teaching inherently uses I, P, and B frames (intra pictures and non-intra pictures), which are part of the MPEG standard. Therefore, the teaching of the MPEG standard inherently teaches the intra and non-intra pictures in the MPEG standard.

Regarding claim 5, the claimed "method according to claim 4, wherein said processing step further comprises one or more of the steps selected from the group comprising: counting a number of bits in at least one of the non-intra pictures in the MPEG video signal; analyzing motion vectors in at least one of the non-intra pictures in the MPEG video signal; analyzing discrete cosine coefficients of at least one of the intra pictures in the MPEG video signal; or obtaining a sample picture from one or more of the plurality of channels containing no programming, storing information from the sample picture in memory, and comparing information from at least one of the intra pictures in the MPEG video signal with the stored information from the sample picture" is met by the detection of the presence of a valid 8VSB digital signal being accomplished by detecting a valid segment of video and/or a field sync signal [col. 5, lines 7-10].

Regarding claim 6, the claimed "method according to claim 1, wherein said encoding step further comprises the step of encoding at least a portion of each of the plurality of channels to provide the corresponding encoded signal for each of the plurality of channels" is met by the plurality of digital channels being received in MPEG format (a pre-encoded video format) [col. 3, line 25].

Regarding claim 7, the claimed “method according to claim 1, wherein the subset of channels comprises a plurality of channel indicators for identifying the channels in the subset of channels” is met by Channel ID and Antenna Position of Figure 7, which serve to indicate the location of the channels which are available for tuning.

Regarding claim 8, the claimed “method of creating a subset of channels with programming from a plurality of channels” is met as follows:

- The claimed step of “receiving a plurality of channels, wherein the plurality of channels comprises at least one channel with programming” is met by the television receiver being capable of receiving conventional analog television signals, as well as digital television signals [col. 2, lines 31-34].
- The claimed step of “processing at least a portion of an audio signal in a predetermined number of channels from the plurality of channels to determine which of the predetermined number of channels contain programming to provide a program channel subset” is met by the autoprogramming of the channels and the storage of the skip data memory 33 [col.4, lines 45-56]. The separation of the audio portion of the signal for detection [col. 3, lines 22-25] indicates that the system can detect a valid 8VSB signal by obtaining a valid segment of video or audio [col. 5, line 10].
- The claimed step of “storing the program channel subset into memory” is, again, met by the storage of the skip data memory 33 [col. 4, lines 45-56].

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Regarding claim 9, the claimed "method according to claim 8, wherein the programming on the subset of channels contains video content" is met by the fact that the channels contain analog or digital television (video) signals [col. 2, lines 31-34].

Regarding claim 10, the claimed "system for creating a subset of channel indicators for channels with programming from a plurality of channels" is met as follows:

- The claimed "receiver for receiving a plurality of channels, wherein the plurality of channels comprises at least one channel with programming" is met by the television receiver being capable of receiving conventional analog television signals, as well as digital television signals [col. 2, lines 31-34].
- The claimed "video processor programmed to: encode at least a portion of a predetermined number of channels from the plurality of channels to provide a corresponding encoded signal for each predetermined channel" is met by the fact that the digital television signals are received in pre-encoded format (MPEG format) and therefore are encoded prior to reception at the user device [col. 3, lines 18-27].
- The claimed "video processor programmed to: process each encoded signal to determine which of the predetermined number of channels contain programming to provide the subset of channel indicators" is met by the autoprogramming of the channels and the storage of the skip data memory 33 [col.4, lines 45-56].

- The claimed step of “memory for storing the subset of channel indicators” is, again, met by the storage of the skip data memory 33 [col. 4, lines 45-56].

Regarding claim 11, the claimed “system according to claim 10, wherein the system presents channels corresponding only to the subset of channel indicators stored in memory” is met by the fact that the “1” in the “skip flag data” column indicates that the channel is not to be skipped during operation by the user [col. 4, lines 45-56].

Regarding claim 12, the claimed “system according to claim 10, further comprising an audio detection circuit for analyzing at least a portion of an audio signal in the predetermined channels to determine which of the predetermined number of channels contain programming” is met by the separation of the audio portion of the signal for detection [col. 3, lines 22-25]. The system can detect a valid 8VSB signal by obtaining a valid segment of video or audio [col. 5, line 10].

Regarding claim 13, the claimed “system according to claim 10, wherein each encoded signal is an MPEG video signal containing pictures selected from the group comprising intra pictures or non-intra pictures” is met inherently by the teachings of the MPEG standard. Shintani expressly teaches that the encoded signals are MPEG format [col. 3, line 25], however, is silent as to the inner-workings of the MPEG standard, only stating that it is a well-known video format used in the United States. This teaching inherently uses I, P, and B frames (intra pictures and non-intra pictures), which are part of the MPEG standard. Therefore, the teaching of the MPEG standard inherently teaches the intra and non-intra pictures in the MPEG standard.

Regarding claim 14, the claimed "system according to claim 13, wherein the video processor is further programmed to perform one or more of the steps selected from the group comprising: counting a number of bits in at least one of the non-intra pictures in the MPEG video signal; analyzing motion vectors in at least one of the non-intra pictures in the MPEG video signal; analyzing discrete cosine coefficients of at least one of the intra pictures in the MPEG video signal; or obtaining a sample picture from one or more of the plurality of channels containing no programming, storing information from the sample picture in memory, and comparing information from at least one of the intra pictures in the MPEG video signal with the stored information from the sample picture" is met by the detection of the presence of a valid 8VSB digital signal being accomplished by detecting a valid segment of video and/or a field sync signal [col. 5, lines 7-10].

Regarding claim 15, the claimed "system according to claim 10, wherein the encoder encodes at least a portion of each of the plurality of channels to provide a corresponding encoded signal for each of the plurality of channels" is met by the plurality of digital channels being received in MPEG format (a pre-encoded video format) [col. 3, line 25].

Regarding claim 16, the claimed "system for creating a subset of channels with programming from a plurality of channels" is met as follows:

- The claimed "receiver for receiving a plurality of channels, wherein the plurality of channels comprises at least one channel with programming including video and audio" is met by the television receiver being capable

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of receiving conventional analog television signals, as well as digital television signals [col. 2, lines 31-34].

- The claimed “audio detection circuit for processing at least a portion of an audio signal in a predetermined number of channels from the plurality of channels to determine which of the predetermined number of channels contain programming to provide a program channel subset containing at least audio and/or video” is met by the autoprogramming of the channels and the storage of the skip data memory 33 [col.4, lines 45-56]. The separation of the audio portion of the signal for detection [col. 3, lines 22-25] indicates that the system can detect a valid 8VSB signal by obtaining a valid segment of video or audio [col. 5, line 10].
- The claimed “memory for storing the program channel subset” is, again, met by the storage of the skip data memory 33 [col. 4, lines 45-56].

Regarding claim 17, the claimed “system according to claim 10, wherein the subset of channels comprises a plurality of channel indicators for identifying the channels in the subset of channels” is met by Channel ID and Antenna Position of Figure 7, which serve to indicate the location of the channels which are available for tuning.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hakamada (USP 4,870,492) discloses a television receiver having a channel skip function capable of skipping a channel based on the skip flag data stored in memory.

Kessler (USP 6,621,528) discloses a digital MPEG tuning television that can autoprogram MPEG channels into a non-volatile memory so that during channel selection the digital TV control module may ascertain how to tune the tuner to any particular selected program if one exists.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon who can be reached at (571) 272-7356 or Michael.Shannon@uspto.gov. The examiner can normally be reached by phone Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon
Examiner
Art Unit 2614

Michael R Shannon
August 22, 2005


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600